

U.S.-India ICT Working Group  
U.S. Telecommunications Subcommittee  
Policy Agenda  
November 4, 2009

The U.S. Telecommunications Subcommittee supports the collaborative nature of the U.S.-India ICT Working Group and the progress that has been made on telecommunications policy issues since the initiation of the Working Group in 2005. The Subcommittee takes this opportunity to acknowledge the momentous decisions undertaken by the Indian Parliament and the U.S. Congress to establish civilian nuclear cooperation, an important new cornerstone in the U.S.-Indian relationship and applauds the new governments of the United States and India as they move forward to deepen the relationship between the two countries.

As India has experienced, communications and new technologies not only spark growth in that sector of the economy, they also enable businesses and governments to increase efficiencies and provide opportunities to improve the quality of people's lives through new services. The recommendations made in this paper offer solutions that could create multiplier effects in the economy by increasing investment opportunities to build out infrastructure through changes in important telecommunications regulatory policies.

Despite the global economic slowdown, India continues to be one of the world's fastest growing ICT markets. Between March 2006 and August 2009, India's total wireline and wireless telephone subscribers increased from approximately 142 million to almost 495 million, representing almost 250% growth in three-and-half years. In January 2009, India reached a new high, adding over 15 million new mobile phone subscribers in that month alone. Broadband ( $\geq$  256 kbps) has grown almost 173% since 2007, yet numbers of connections remain low relative to the population.

Government initiatives to liberalize the market have played a significant role in this extraordinary growth. The Subcommittee recognizes and applauds important past government decisions to eliminate Access Deficit Charges (ADC) on the provision of international long distance services, the decision to liberalize access to cable landing stations, and the Indian government's decision to increase the level of FDI in the telecommunications sector to 74% in 2007 while initially resolving international carriers' concerns over remote access restrictions. In order to further maximize the investment potential in the telecommunications sector, the Subcommittee recommends India eliminate the FDI limit and permit 100% foreign direct investment. This will provide a significant increase in foreign investment inflow to increase infrastructure deployment.

While questions remain, the Telecommunications Subcommittee welcomes the Indian government's decision to move forward with plans to hold an auction for IMT spectrum as outlined in its revised Information Memorandum of October 23.

The Subcommittee also urges the Department of Telecommunications to act on important policy recommendations made by the Telecommunications Regulatory Authority of India (TRAI), including:

- Recommendation on liberalization of VoIP telephony - 2008
- Licensing guidelines and terms and conditions for Mobile Virtual Network Operators (MVNOs) - following approval of the concept by the Telecom Commission in 2009

In order to continue India's march toward greater connectivity for its citizens, we encourage further liberalization of the market to speed the development and adoption of new technologies, introduce new competition and promote multilateral collaboration. Below we consider new and unresolved issues for discussion during the November 4, 2009 meeting of the U.S.-India ICT Working Group in Washington, DC.

### **(1) Advanced Wireless Telecom Services and Spectrum**

The Subcommittee is encouraged and welcomes DoT's publication of the Information Memorandum detailing the upcoming January 14, 2010, IMT spectrum auction. The Subcommittee has long encouraged India to hold this auction which will increase the availability and capacity of wireless networks for consumers in India and, we support it taking place as scheduled in the Information Memo.

The Subcommittee would like to underscore the importance of all sides understanding the terms and procedures for the planned auction well before the auction begins. India has a unique opportunity to implement international best practices in spectrum allocation and licensing to ensure that Indian consumers receive the advantages of the best wireless services the market can provide. In following international best practices, India should allow for a full and non-discriminatory opportunity for new and international investors to participate in the auction process.

Without suggesting India delay its auction any longer, we take this opportunity to raise some issues and make suggestions we hope India can either address in the run up to the auctions in January 2010 or consider addressing at a future point to ensure a robust and competitive wireless market that welcomes the full participation of new and foreign entrants.

Implications of the Auction to the Future of the Telecom Sector in India. In reviewing the Information Memorandum of October 23, 2009, the Subcommittee notes that DoT and other government ministries have not set out long term strategies in several areas, and this could impact participation in the upcoming auction as well as future growth in the wireless sector. Specifically, the Information Memorandum does not address how the following issues will be treated in the future: method of future spectrum allocation and assignment (2G or 3G); spectrum sharing or trading rules, and; spectrum and licensing fees.

FIPB/MHA Approvals. The guidelines, timelines, manner and the eligibility criteria through which the auctions are conducted, should allow new entrants – especially foreign

companies who must form joint ventures with local partners and receive Foreign Investment Promotion Board and Ministry of Home Affairs approval – sufficient time and equal opportunity to meet the auction eligibility criteria. We note that the October 23 Information Memorandum indicates the FIPB approval can be obtained following the auction. Will that be the case for all other such approvals? It would be very helpful if India could clarify the guidelines for Foreign Promotion Board and Ministry of Home Affairs approval process to ensure timely and effective processing of applications

UAS Applications. New entrants bidding on 3G spectrum are required under the rules to pay \$321 million to acquire a UAS license. Whereas previous UAS applicants received spectrum as part of their UAS license, in the case of 3G, companies will have to bid for spectrum in addition to paying for the license. This policy appears to discriminate against new entrants who will be competing against incumbents who will also be bidding on 3G spectrum and in many cases have received 2G spectrum at the time of approval of their UAS license. What provisions will be made to ensure new entrants bidding for 3G spectrum will not be disadvantaged by this policy? How does the Indian government plan to address this imbalance?

Merger and Acquisition Policy: Under current FDI limits in the telecommunications sector, foreign entities seeking to bid on 3G spectrum must either be part of a current joint venture or form a joint venture with an Indian partner after winning spectrum through an auction. However, the currently required three year waiting period before a UAS license holder can merge with another operator creates imbalances for foreign entities seeking to bid in the upcoming auctions. Foreign entities winning 3G spectrum will have to choose from a more limited pool of potential joint venture candidates since some UAS license holders will be restricted from merging with the foreign entity under the current M&A policy. We recommend that India eliminate the three year M&A waiting period for UAS license holders. This issue could also be resolved if India were to eliminate its FDI limits in the telecommunications sector.

Future Spectrum. For companies that end up providing only 3G services as a result of the auction, how does India plan to allocate spectrum in the future after this initial auction of spectrum - through auctions or subscriber-linked criteria, as has been done in the past?

The Subcommittee also strongly encourages the DoT and the TRAI to focus on harmonized spectrum allocations. There are current standardization activities for future generations of technologies, and there should be consideration of those technologies in the 3G exercise. India today utilizes 800 MHz, 900 MHz, 1800 MHz and 2100 MHz (which is now proposed for the 3G auction) for mobile devices. India is considering 700 MHz, 800 MHz 2.3 GHz and 2.5 GHz and in the future 3.4 GHz. Having affordable devices and services are key to reducing the digital divide. India should consider adopting a spectrum band plan and associated technical rules that will maximize efficient utilization of available spectrum for nationwide deployment of affordable mobile broadband services in India. Existing wireless carriers, as well as potentially new entrants, should be able to deploy mobile broadband technologies in a cost effective manner by using technologies that enable economies of scale, paired with the availability

of large-enough blocks of spectrum in bands to maximize the use of the widest variety of terminals. A harmonized approach is essential across Asia-Pacific to secure affordable high performance mobile services and easy cross border coordination and cooperation. TRAI would take an important step in expanding India's broadband connectivity by considering neighboring and global markets.

We commend DoT for establishing a Joint Task Group to examine use of future spectrum. We understand an initial meeting was held in July 2009, and many companies and organizations have submitted proposals. We further understand that the group is supposed to report to the Government by the end of December of this year on the results of its deliberations.

## **(2) Licensing and Regulatory Efficiency**

Global companies operating overseas are strongly committed to the rule of law and respecting host country laws and regulations. Companies prefer investment opportunities where the rules of the game are clear and easily understood. India will be successful in attracting greater foreign investment as it continues efforts to establish a clearly defined structure of laws and regulations.

Simplification of Existing Licensing Regime. The Indian telecom sector has come a long way in terms of growth in subscribers, teledensity, service offerings, and technology. The regulatory and licensing regime, however, has not kept pace with the technological developments taking place world over. This is understandable as, unlike technology, changes in fundamental frameworks need consultation and detailed analysis before a change is accepted and incorporated in the licensing regime.

The present day licensing and regulatory framework should recognize the need for technology and service neutrality. With technology comes the issue of spectrum which is significant to any wireless network. The present classification of service specific bands should be moved to a regime wherein any service can be provided under any of the bands so long as this is technically feasible. Operators should be authorized to determine the technology to be deployed. Spectrum should be allocated based on auctions, which will help the government receive the appropriate value for such a scarce natural resource.

Telecom operators are trying to become global operators by expanding their operations across countries and continents. While it is imperative for a country to maintain its sovereignty by applying all security measures, it should promote and support global telecom operators expanding their operations into its territory. India should expand regulatory policies to encourage and support global telecom networks within India, like it did three years ago in the field of Remote Access.

In addition, India should refrain from retroactive rule making (applying new rules to past arrangements) which creates market uncertainty and complicates existing contractual arrangements.

ILD and NLD Licensing. The Subcommittee notes that as of 2009, AT&T, BT, Cable and Wireless, Verizon, and France Telecom have received licenses to provide international (ILD) and national long distance (NLD) services in India. We note, however, that the licenses have not been modified to appropriately reflect policy considerations for the next generation of services and service providers, and that certain aspects of India's ILD and NLD licensing processes and procedures continue to impose barriers that impede carriers' ability to fully operationalize these licenses. As presently written, many of the regulations cover policy concerns solely appropriate for mass market consumer voice telephony and have not been updated to reflect data and IP services, or the considerations of business enterprise customers. In addition, the scope of resale authority by licensed facilities-based operators is still unclear – as are the processes, timelines and criteria for processing of clearance and approvals under both the ILD and NLD licensing regimes. This lack of clarity stands to undermine the competitive reforms made thus far by both TRAI and DoT. While some of these issues have already been taken up by ACTO, the Subcommittee supports the request by ACTO and commends DoT and TRAI for forming a senior level committee to examine these issues and looks forward to its recommendations.

Legal Intercepts. In the critical area of legal intercept and monitoring for non-voice, VPN/MPLS related Internet Protocol (IP) services, telecommunications carriers are keen to comply with Indian regulations concerning legal intercepts. However, in order to install IP/data related state-of-the-art legal intercept equipment, telecommunications carriers require clarity with respect to the technical specifications of the equipment and compliance requirements. Despite the DoT's recognition of the importance of telecommunications carriers' IP and VPN services to India's BPO sector, regulations for legal intercept compliance have not kept pace. We urge the Department of Telecommunications to update its legal intercept and monitoring specifications for telecommunications carriers holding ILD and NLD licenses providing VPN/MPLS-related IP services as current regulations continue to be applicable to traditional voice traffic.

The Subcommittee understands that the Government of India soon plans to implement the Centralized Monitoring Solution (CMS). In this regard, C-DoT has been identified as the agency to study the networks of all the operators and implement the CMS. We request the government of India share the details of the proposed CMS plan to enable private sector input into the CMS implementation process.

Remote Access. Global enterprise service providers continue to be concerned over the Indian government's shifting position on remote access of networks by imposing additional restrictions. This has the potential to adversely affect all global service providers providing international connectivity in India. Global service providers serving MNCs and Indian multi-site office locations require the ability to conduct "remote access" (RA) management of networks in India, from Global Network Operations Centers (NOCs) outside India (e.g., in the U.S.). The issue was raised in 2006, and 18 months later resolved with a new set of restrictions on RA after a senior Indian government delegation visited NOC sites of global service providers in the U.S. and

Europe. Based on their report, in April 2007 new FDI guidelines (Press Note 3 of 2007) replaced the earlier Press Note 5 of 2005 relating to 74% FDI in telecom.

More recently, since April 2009, DoT has reversed the interpretation in two areas - disallowing 24-hour access and customer provisioning for global accounts using RA. This has already started impacting RA approvals for ISPs and we have reliable information that it will soon impact existing and new RA approvals under the ILD / NLD licenses.

Press Note 3 of 2007, and the NLD, ILD and ISP licenses contain no restrictions either on 24-hour access through RA or any explicit prohibition with regards to customer provisioning by using accounting / billing information. We believe that the new interpretation is not only a reversal, but at variance with the FDI guidelines (Press Note 3 of 2007), NLD, ILD and ISP licenses, as well as several approvals given by the DoT to multiple parties since 2007.

Global carriers under the newly formed Association of Competitive Telecom Operators (ACTO) have met with DoT and requested suitable clarifications which will allow RA on a 24-hour basis and billing information to be sent outside India for network / customer provisioning. During the discussions, senior-most officers in DoT and concerned officers of security agencies reached an agreement to issue a clarification in this regard. ACTO explicitly represented that the 24-hour / customer provisioning requirements are only on behalf of global service providers which service enterprise customers. These do not relate to mobile or UAS licenses.

We remain concerned about the fact that these clarifications have not been issued in spite of assurances and multiple follow up meetings with the DoT. An early issuance of clarifications in this regard covering NLD, ILD and ISP licenses only could go a long way toward removing the current uncertainty.

Encryption Standards. Companies support the freedom of business and consumers in India to use strong encryption to protect their corporate and personal information. Strong encryption uses robust encryption algorithms. The freedom to use strong encryption is a global standard for securing information online, such as confidential business information, financial information, online transactions and internal government communications, from intrusion by hackers, thieves, competitors and other wrongdoers. The Subcommittee understands that the government is considering upgrading encryption levels which at present are restricted up to 40 bit under the NLD/ILD/ISP License. This opportunity for change has been granted by way of an amendment in the Information Technology Act 2008, under the provisions of Section 84-A, which empowers the central government to prescribe modes and methods of encryption for secure e-commerce transactions. We request the Government of India to liberalize the present encryption policy as strong encryption also enables India's rapidly growing IT and BPO industries, which rely on strong encryption to secure their global clients' confidential information. U.S. companies urge India to adopt policies that protect the freedom to use strong

encryption online and, consistent with global practice; do not set limits on the type of encryption technologies employable by the private sector.

Service Disruption. India is experiencing a sharp increase in telecommunications service disruptions owing to damaged high-capacity fiber-optic cable facilities. This is caused by frequent cable cuts by agencies/organizations that lay underground infrastructure. This can be in the form of telecom cables, water and gas pipelines. These disruptions have begun to impact the business of global carriers operating in India both from a quality and economics perspective. In order to provide end-to-end, always-on connectivity, global carriers rely on leased circuits procured from access providers in India. This service provisioning is backed by strict Service Level Agreement (SLA) norms due to the need for high quality and resilient connectivity. However, frequent stoppages due to cable cuts experienced in the access providers' networks cause serious losses to both customers and global carriers – who pay significant penalties on account of non-conformity to SLA norms. The Subcommittee urges the government of India to coordinate the work of relevant agencies at the national, state and local level to improve protection of telecommunications infrastructure from inadvertent damage caused by construction related cable cuts. With a rapidly expanding economy leading to both more construction activity, and the proliferation of high capacity fiber optic facilities, improved governmental and industry coordination is needed. All industry sectors would benefit from establishing such cooperation based on global best practices.

Open Skies. To sustain communications services and applications, companies and end-users rely on robust infrastructure and the ability to select the technology and provider based on cost, effectiveness and availability. This ability to source the best-suited infrastructure for a given application or service enhances the resulting service and may advance its service launch or reduce consumer costs. For satellite infrastructure, the U.S. and many WTO members have adopted policies that permit users of satellite services the flexibility to work directly with any satellite operator that has the ability to serve them, without constraint by government preferences. U.S. industry encourages India to adopt such an “open skies” satellite policy to allow consumers the flexibility to select the satellite capacity provider that best suits their business requirements.

Licensing Requirements and Fees. As in the past, we urge India to reevaluate the basis for license application fees, capitalization requirements, and bank guarantees. As a general matter, application fees should reflect the cost of processing an application. In line with international best practices, requirements relating to capitalization, the rationale for which makes little sense in most cases, should be eliminated. While bank guarantees are appropriate in limited cases, such requirements should reflect the scope of business intended to be offered and should be a temporary, not permanent requirement.

The inconsistencies that currently exist between licensing fees and capitalization requirements for different services in India demonstrate the need for reform. For example, an applicant for an ILD license must have a capitalization of \$625,000 and pay a license application fee of \$625,000 and a bank guarantee of \$625,000. For GMPCS (Global Mobile Personal Communications by Satellite), the capitalization requirement is

\$25 million; license application fee is \$250,000 and there is a requirement for a \$250,000 bank guarantee. A capitalization requirement for GMPCS that is more than 25 times larger than what is required of ILD licensees cannot be justified – hence, as noted above, the capitalization requirements for both services should be eliminated. In addition, all license application fees should reflect the cost of application processing. A paper providing additional detail on this issue was provided by a Subcommittee member directly to DoT prior to the December 2008 meeting of the Working Group in New Delhi. DoT had indicated an interest in revising GMPCS licensing requirements, but no public action has been taken to date. The Subcommittee looks forward to hearing how the DoT may address this issue.

With respect to annual license fees, which are a percentage of annual gross revenue, we would appreciate knowing more about how the government currently arrives at the fee percentage, and what is the basis for charging some services higher fees than others? We believe that annual fees, as well as licensing fees, should be based solely on the accepted principle of recouping administrative costs. It is not clear why holders of an ILD license are required to pay 6% of annual gross revenue and providers of GMPCS services are charged 10%.

It is important to note GMPCS and other satellite services can play a very important role in disaster preparedness, rescue and relief efforts, particularly in remote areas and at times when the terrestrial infrastructure is compromised or overloaded. Satellite services should be included in India's disaster management plans but the licensing barriers noted above make it difficult for those services to be available currently.

Similarly, we urge India to take a closer look at the methodology it currently uses to calculate license fees for both ILD and NLD operators to ensure that India's license fee regime does not frustrate the goals of promoting competition, creating a level playing field among all service providers, and reducing the sales price of services to consumers. Under the current methodology, license fees for these operators are based on revenues from both licensed and unlicensed activities, which make the calculation of such fees unnecessarily burdensome.

In light of the variances in licensing fees and the burdensome rates of the licensing fees, the Subcommittee is troubled to learn that the DoT may be planning to impose a uniform rate of 8.5% across all telecom licenses and impose it retroactively to existing contractual agreements that were calculated using the earlier established licensing fees.

The standalone global carriers holding ILD, NLD, and ISP (with Internet telephony) licenses currently pay 6% of their Adjusted Gross Revenue (AGR) as a license fee to DoT. There are other categories of licenses (access services) that require AGR based fees which range from 6% to 10% depending upon the category of the circle (A, B, C, and Metro) in which they operate. There are integrated operators that hold virtually all type of licenses and pay revenue share based fees to DoT as per their license terms and conditions.

The liberalization of ILD and NLD saw the advent of global telecom carriers that serve the needs of the enterprise data segment. The sector already witnessed a reduction of licensing fees from 15% to 6% in 2005-2006. As such, the Subcommittee is not able to understand the timing, need and rationale for a sudden hike in the license fees.

If DoT imposes a uniform rate of 8.5% across all telecom licenses, such action will impact standalone global carriers operating in India as well as similarly placed standalone licensees. This increase would severely impact telecommunications carriers based on the current cost (including the 6% licensing fee), which is already part of long term contracts. The sudden hike in the cost would impact costs and returns on investment for the carriers. Since this will amount to a change in the license terms and conditions, DoT should consider referring this matter to TRAI for issuing suitable recommendations after holding public consultation with the industry in a transparent manner.

In addition, the license fee should not operate as a multi-stage and cumulative assessment. The fact that input costs (such as charges for interconnection or local loops which themselves already reflect the license fee) are not deductible from the adjusted gross revenue on which the license fee is calculated, results in the multi-stage assessment of license fees in some cases. Whereas facilities-based operators using their own networks need only pay the license fee once, wholesale inputs that operators such as stand-alone ILDOs, NLDOs, ISPs, and potentially ISPs buy from other operators as part of their own infrastructure-based service offerings are subject to the license fee twice – once when they are sold from the first network owner to the second operator, and then again when the second operator sells them to the end user. The same applies to operators who interconnect to facilities-based operators' facilities. As a consequence of levying a license fee at every sales point in the supply chain, a telecom operator who buys wholesale inputs from other licensed operators is placed at a competitive disadvantage with those who do not need to buy these inputs.

To avoid this multi-stage assessment of licensing fees, India could clarify that license fees apply only to revenues from retail sales transactions where the service is provided to an end user. Intermediate or wholesale transactions where the purchaser is another carrier would not be counted. Since the service fee charged by the first telecom operator would not need to recover any license fee, all operators would be able to compete on a true level playing field. Alternatively, India could specify that for the purposes of license fee calculations, licensed providers are permitted to deduct from their gross revenue base the value of any wholesale telecom services they have purchased as inputs. Either of these two approaches would eliminate the double assessment problem. Under the ILD and NLD licenses, the operator is allowed to provision both voice and data services. It is ironic that the ILDOs/NLDOs are allowed to take deduction of input costs (interconnection/pass through charges) when they provide voice services. However, when they provide pure data services, they are not allowed any such deduction of input costs. There needs to be a level playing field within the same license.

For example, in the United States, the Federal Communications Commission (FCC) has adopted the excise tax approach purposes of Universal Service Obligation Fund (USOF)

contribution, where each carrier is assessed a fee based upon its revenue from end-users. Lastly, should licensing fees be extended to additional ISP services, we urge that the methodology for calculating the revenue base should not result in double assessment of fees on certain ISPs.

### **(3) Internet Protocol (IP) –Enabled Services and Business Process Outsourcing (BPO)**

Business Process Outsourcing providers rely on next generation telecom infrastructure in the provision of their services. The use of VoIP in the call center business can significantly reduce costs while improving service offerings and scale-ability at the enterprise level. Unfortunately in India, VoIP can only be used in CUGs (closed user groups, or just among sites). For example, if a company has two offices, they are allowed to link using an IP trunk and VoIP, but not out to the PSTN. So companies must maintain separate systems for internal and external communications, increasing establishment costs. We continue to note that VoIP provided over public networks that can connect to the Public Switched Telephone Network (PSTN) eliminates the requirement of users to have a dual-investment in infrastructure; that enterprise users realize enormous savings in the cost of moving telephones or adding telephones; and that company investment in Internet communications realizes higher return because more applications can be managed on a single infrastructure.

Furthermore, VoIP offers advantages for companies in their business continuity planning by enabling companies to reconfigure where they receive calls in a flexible manner. This function allows companies to reroute their communications and continue operations when an emergency strikes, such as a natural disaster or other event.

The Subcommittee is encouraged by the TRAI recommendation published in August 2008 that calls for liberalization of VoIP services and urges the DoT to implement them as soon as possible. The Sub-committee understands that DoT is in the process of issuing suitable clarifications on this issue and looks forward to learning DoT's decision.

Please direct any questions to:

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